National Environmental Achievement Track

Application Form

San Juan Generating Station

Name of facility

Public Service Comapnay of New Mexico

Name of parent company (if any)

County Road 6800

Street address

P.O. Box 227

Street address (continued)

Waterflow, NM 87421

City/State/Zip code

Give us information about your contact person for the National Environmental Achievement Track Program.

Name Mike Farley

Title Environmental Supervisor

Phone (505) 598-7628

Fax (505) 598-6036

E-mail mfarley@pnm.com

Section A

Tell us about your facility.

Why do we need this information?

EPA needs background information on your facility to evaluate your application.

What do you need to do?

- Provide background information on your facility.
- Identify your environmental requirements.

1 What do you do or make at your facility?

Coal-fired Steam Electric Generating Facility

2 List the Standard Industrial Classification (SIC) code(s) or North American Industrial Classification System (NAICS) codes that you use to classify business at your facility.

SIC
4911

NAICS

3 Does your company meet the Small Business Administration definition of a small business for your sector?

☐ Yes ☒ No

4 How many employees (full-time equivalents) currently work at your facility?

☐ Fewer than 50

☐ 50-99

☒ 100-499

☐ 500-1,000

☐ More than 1,000

5 Does your facility have an EPA ID number(s)?

If yes, list in the right-hand column.

☒ Yes ☐ No

NPDES – NMD0028606
RCRA – NMD069424323
TRI – 87421SNJNGCOUNT

6 Identify the environmental requirements that apply to your facility. Use the Environmental Requirements Checklist, at the back of the instructions, as a reference. List your requirements to the right ***or*** enclose a completed Checklist with your application.

Checklist + spreadsheet from EMS

7 Check the appropriate box in the right-hand column.

☐ I've listed the requirements above.

☒ I've enclosed the Checklist with my application.

8 Optional: Is there anything else you would like to tell us about your facility?

See attached letter

Section B

Tell us about your EMS.

Why do we need this information?

Facilities must have an operating Environmental Management System (EMS) that meets certain requirements.

What do you need to do?

- Confirm that your EMS meets the Achievement Track requirements.
- Tell us if you have completed a self-assessment or have had a third-party assessment of your EMS.

1 Check ***yes*** if your EMS meets the requirements for each element below as defined in the instructions.

a. Environmental policy ☒ Yes

b. Planning ☒ Yes

c. Implementation and operation ☒ Yes

d. Checking and corrective action ☒ Yes

e. Management review ☒ Yes

2 Have you completed at least one EMS cycle (plan-do-check-act)? ☒ Yes

3 Did this cycle include both an EMS and a compliance audit? ☒ Yes

4 Have you completed an objective self-assessment or third-party assessment of your EMS? ☒ Yes

If yes, what method of EMS assessment did you use?

☐ Self-assessment

- ☐ GEMI ☐ Other
- ☐ CEMP

☒ Third-party assessment

- ☒ ISO 14001 Certification
- ☐ Other

Section C

Why do we need this information?

Facilities must show that they are committed to improving their environmental performance. This means

that you can describe past achievements and will make future commitments.

What do you need to do?

Refer to the Environmental Performance Table in the instructions to answer questions 1 and 2.

1 Describe your past achievements for at least two environmental aspects. If you need more space than is provided, attach copies of this page.

Note to small facilities: If you qualify as a small facility as defined in the instructions, you are required to report past achievement for at least one environmental aspect.

First aspect you've selected

What aspect have you selected?	What was the previous level (2 years ago)?		What is the current level?	
	Quantity	Units	Quantity	Units
SO2 EMISSIONS	42900	TONS	29500	TONS

i. How is the current level an improvement over the previous level?

Substantial reduction in the amount of SO2 emissions

ii. How did you achieve this improvement?

Major upgrade of the Flue Gas Desulfurization (FGD) system at San Juan Generating Station.

Second aspect you've selected

What aspect have you selected?	What was the previous level (2 years ago)?		What is the current level?	
	Quantity	Units	Quantity	Units
Toxic Release Inventory Chemicals	3.6	Million pounds	2.2	Million pounds

i. How is the current level an improvement over the previous level?

Reduction of reported TRI chemicals transferred or released to the environment.

ii. How did you achieve this improvement?

Increased flue gas scrubbing reduced the acid gas emissions and site specific ash and coal sampling provided better estimates of emissions.

2 Select at least four environmental aspects (no more than two from any one category) from the Environmental Performance Table in the instructions and then tell us about your future commitments. If you need more space than is provided, attach copies of this section.

Note to small facilities: If you are a small facility, you are required to make commitments for at least two environmental aspects in two different categories.

First aspect you've selected

a. What is the aspect? SO2 Emissions

b. Is this aspect identified as significant in your EMS? ☒ Yes ☐ No

c. What is the current level? You may choose to state this as an absolute value or in terms of units of production or output.	☒ Option A: Absolute value	0.439 lbs/mmbtu (Quantity/Units)
	☐ Option B: In terms of units of production or output	(Quantity/Units)
d. What is the improvement you are committing to over the next three years? You may choose to state this as an absolute value or in terms of units of production or output.	☒ Option A: Absolute value	0.420 lbs/mmbtu (Quantity/Units)
	☐ Option B: In terms of units of production or output	(Quantity/Units)
e. How will you achieve this improvement?	Increased flue gas scrubbing through optimization of new limestone system	

Second aspect you've selected

a. What is the aspect?	Toxic Release Inventory Chemical Reduction	
b. Is this aspect identified as significant in your EMS?	☒ Yes ☐ No	
c. What is the current level? You may choose to state this as an absolute value or in terms of units of production or output.	☒ Option A: Absolute value	2.3 Million lbs (Quantity/Units)
	☐ Option B: In terms of units of production or output	(Quantity/Units)
d. What is the improvement you are committing to over the next three years? You may choose to state this as an absolute value or in terms of units of production or output.	☒ Option A: Absolute value	250,000 lbs (reduction) (Quantity/Units)
	☐ Option B: In terms of units of production or output	(Quantity/Units)
e. How will you achieve this improvement?	Reduction of acid gas emissions will be achieved by increased flue gas treatment. Other reductions will occur through lower ash levels in coal burned.	

Third aspect you've selected

e. How will you achieve this improvement?

Reduction of acid gas emissions will be achieved by increased flue gas treatment. Other reductions will occur through lower ash levels in coal burned.

Third aspect you've selected

a. What is the aspect?

Solid Waste

b. Is this aspect identified as significant in your EMS?

☒ Yes ☐ No

c. What is the current level? You may choose to state this as an absolute value or in terms of units of production or output.

☒ Option A: Absolute value — 1.7 million tons (Quantity/Units)

☐ Option B: In terms of units of production or output — (Quantity/Units)

d. What is the improvement you are committing to over the next three years? You may choose to state this as an absolute value or in terms of units of production or output.

☒ Option A: Absolute value — 50,000 tons (reduction) (Quantity/Units)

☐ Option B: In terms of units of production or output — (Quantity/Units)

e. How will you achieve this improvement?

Through the sale of ash for beneficial use as a road base and a replacement for cement

Fourth aspect you've selected

a. What is the aspect?

Preservation/Restoration

b. Is this aspect identified as significant in your EMS?

☐ Yes ☒ No

c. What is the current level? You may choose to state this as an absolute value or in terms of units of production or output.

☒ Option A: Absolute value — none (Quantity/Units)

☐ Option B:

	In terms of units of production or output	(Quantity/Units)
d. What is the improvement you are committing to over the next three years? You may choose to state this as an absolute value or in terms of units of production or output.	☒ Option A: Absolute value	Migratory Fish Passage (Quantity/Units)
	☐ Option B: In terms of units of production or output	(Quantity/Units)
e. How will you achieve this improvement?	PNM will support the San Juan River Recovery Implementation Program with the design and construction of a migratory fish passage in the San Juan River. This fish passage will be constructed by 2002. PNM's support will include the donation of $100,000 and an easement on PNM land for the construction. This fish passage will encourage the migration of the Colorado Pike Minnow and help to restore habit for this endangered species.	

Revised 11/16/2000 - Mike Farley

Section D

Why do we need this information?

Facilities must demonstrate their commitment to public outreach and performance reporting. You should have appropriate mechanisms in place to identify community concerns, to communicate with the public, and to provide information on your environmental performance.

What do you need to do?

- Describe your approach to public outreach.
- List three references who are familiar with your facility.

1 How do you identify and respond to community concerns?

We attend community meetings, provide information through local newspapers and web site and we offer tours of the generating station.

2 How do you inform community members of important matters that affect them?

Though community meetings on specific topics and through open house at generating station. Also through topic specific meetings with appropriate individuals.

3 How will you make the Achievement Track Annual Performance Report available to the public?

☒ Website www.pnm.com

☒ Newspaper

☐ Open Houses

☒ Other - publication in Annual Environmental Report

4 Are there any ongoing citizen suits against your facility? ☐ Yes ☒ No

If yes, describe briefly in the right-hand column.

5 List references below

	Organization	*Name*	*Phone number*
Representative of a Community/ Citizen Group	New Mexico Citizens for Clean Air and Water	John Bartlit	(505) 672-9792
State/Local Regulator	New Mexico Environment Department	Jim Shively	(505) 827-1494
Other community/local reference	San Juan College	Dr. James Henderson	(505) 326-3311

On behalf of San Juan Generating Station,

I certify that

- I have read and agree to the terms and conditions, as specified in the *National Environmental Achievement Track Program Description* and in the *Application Instructions*;

- I have personally examined and am familiar with the information contained in this Application (including, if attached, the Environmental Requirements Checklist). The information contained in this Application is, to the best of my knowledge and based on reasonable inquiry, true, accurate, and complete, and I have no reason to believe the facility would not meet all program requirements;

- My facility has an environmental management system (EMS), as defined in the Achievement Track EMS requirements, including systems to maintain compliance with all applicable federal, state, tribal, and local environmental requirements, in place at the facility, and the EMS will be maintained for the duration of the facility's participation in the program;

- My facility has conducted an objective assessment of its compliance with all applicable federal, state, tribal, and local environmental requirements, and the facility has corrected all identified instances of potential or actual noncompliance;

- Based on the foregoing compliance assessment and subsequent corrective actions (if any were necessary), my facility is, to the best of my knowledge and based on reasonable inquiry, currently in compliance with applicable federal, state, tribal, and local environmental requirements.

I agree that EPA's decision whether to accept participants into or remove them from the National Environmental Achievement Track is wholly discretionary, and I waive any right that may exist under any law to challenge EPA's acceptance or removal decision.

I am the senior facility manager and fully authorized to execute this statement on behalf of the corporation or other legal entity whose facility is applying to this program.

Signature/Date Russell Huffman 9/21/2000

Printed Name/Title Russell Huffman / Power Production Manager

Facility Name	San Juan Generating Station
Facility Street Address	County Road 6800 Waterflow, New Mexico P.O. Box 227 Waterflow, New Mexico 87421
Facility ID Numbers	NPDES - NMD0028606 RCRA - NMD069424323 TRI - 87421SNJNGCOUNT

Applicable Requirements – San Juan Generating Station

Environmental Protection Agency (40 CFR, Chapter I)

Regulation	Applicable	State Equiv.	Description	Comments
A – General	✓		Mainly information, no action required by SJGS	
B – Grants and Other Federal Assistance	✓		Mainly information, no action required by SJGS	
C – Air Programs	✓	✓		
D – Water Programs				
Part 104 – Public Hearings on Effluent Standards for Toxic Pollutants			Applies to hearings regarding toxic pollutant effluent standards	
Part 108 – Employee Protection Hearings			Applies to employees who are discharged, etc. because of effluent limitations	
Part 109 – Criteria for State, Local and Regional Oil Removal Contingency Plans			Establishes criteria and guidelines for state, local and regional agencies in the development of oil removal contingency plans	
Part 110 – Discharge of Oil	✓		Defines harmful discharge of oil	
Part 112 – Oil Pollution Prevention	✓		SPCC Plan and Facility Response Plan requirements	
Part 113 – Liability Limits for Small Onshore Storage Facilities			Establishes liability limits for facilities with 1000 bbl or less of oil	
Part 116 – Designation of Hazardous Substances	✓		Identifies hazardous substances for the purposes of Subchapter D	
Part 117 – Determination of Reportable Quantities for Hazardous Substances	✓		Identifies reportable quantities and notification requirements for the purposes of Subchapter D	
Part 121 – State Certification of Activities Requiring a Federal License or Permit			State requirements for issuing certifications	
Part 122 – EPA Administered Permit Programs: NPDES	✓		Permitting requirements for facility discharges	
Part 123 – State Program Requirements			EPA procedures for granting states NPDES program authority	
Part 124 – Procedures for Decision Making			EPA procedures for permit decisions relating to RCRA, UIC, PSD, and NPDES	
Part 125 – Criteria and Standards for the NPDES	✓		Criteria for treatment technologies, effluent limitations, and best management practices	
Part 129 – Toxic Pollutant Effluent Standards			Requirements for discharges of listed toxic pollutants	
Part 130 – Water Quality Planning and Management			Policies and requirements for states and local agencies in	

Regulation	Applicable	State Equiv.	Description	Comments
			water quality planning and management	
Part 131 – Water Quality Standards			Guidelines for EPA, state, and local agencies in establishing water quality standards	
Part 132 – Water Quality Guidance for the Great Lakes System			Applies to Great Lakes states	
Part 133 – Secondary Treatment Regulations			Minimum effluent quality obtained through secondary treatment	
Part 135 – Prior Notice of Citizen Suits			Notice requirements for those filing citizen suits	
Part 136 – Guidelines Establishing Test Procedures for Analysis of Pollutants	✓		Test procedures for analyzing pollutants in accordance with NPDES	
Part 140 – Marine Sanitation Device Standard			Applies to vessels	
Part 141 – National Primary Drinking Water Regulations			Maximum contaminant levels, monitoring requirements, disinfection, filtration and treatment	
Part 142 – National primary Drinking Water Regulations Implementation			Enforcement and variations	
Part 143 – National Secondary Drinking Water Regulations			Control of contaminants with which affect aesthetic qualities of drinking water	
Part 144 – Underground Injection Control (UIC) Program			Requirements for UIC program	
Part 145 – State UIC Program Requirements			Requirements for state implementation of UIC program	
Part 146 – UIC Program: Criteria and Standards			Technical criteria and standards for the various well classes	
Part 147 – State UIC Programs			Identification of states with UIC programs. NM is a listed state	
Part 148 – Hazardous Waste Injection Restrictions			Identification of restricted wastes	
Part 149 – Sole Source Aquifers			Criteria for identifying critical aquifer protection areas	
E – Pesticide Programs			Regulations regarding the manufacture and use of pesticide	
F – Radiation Protection Programs			Protection requirements for specific activities	
G – Noise Abatement Programs			Noise emission standards for specific sources	
H – Ocean Dumping			Requirements for ocean dumping	
I – Solid Wastes	✓	✓	Identification, storage, transport, and disposal of solid and hazardous wastes	
J – Superfund, Emergency Planning, and Community Right-to-Know Programs				

Regulation	Applicable	State Equiv.	Description	Comments
Part 300 – National Oil and Hazardous Substances Pollution Contingency Plan			Provides organization structure and procedures for responding to releases	
Part 302 – Designation, Reportable Quantities, and Notification	✓		Identifies CERCLA and CWA hazardous substances, reportable quantities, and release notification requirements	
Part 303 – Citizen Awards for Information on Criminal Violations Under Superfund			Provides monetary awards to individuals with information on CERCLA violations	
Part 304 – Arbitration Procedures for Small Superfund Cost Recovery Claims			EPA cost recovery procedures	
Part 305 – CERCLA Administrative Hearing Procedures for Claims Against the Superfund			Governs administrative proceedings for the total or partial denial of response claims asserted against Superfund	
Part 307 – CERCLA Claims Procedures			Procedures for submitting cost recovery claims for response costs	
Part 310 – Reimbursement to Local Governments for Emergency Response to Hazardous Substance Releases			Up to $25,000 reimbursement to local governments for response costs	
Part 311 – Worker Protection			Applies to state and local government employees	
Part 350 – Trade Secrecy Claims for Emergency Planning and Community Right-to-Know Information: and Trade Secret Disclosures to Health Professionals			Rules governing trade secrecy claims	
Part 355 – Emergency Planning and Notification	✓		Identifies extremely hazardous substances, emergency planning requirements, and release notification requirements	
Part 370 – Hazardous Chemical Reporting: Community Right-to-Know	✓		MSDS and chemical inventory reporting requirements	
Part 372 – Toxic Chemical Release Reporting: Community Right-to-Know	✓		Toxic Release Inventory (TRI) reportable chemicals, TRI reporting requirements	
Part 373 – Reporting Hazardous Substance Activity When Selling or Transferring Federal Real Property			The US government must disclose notice of hazardous waste activity in real estate transactions	
Part 374 – Prior Notice of Citizen Suits			Notice requirements for those filing citizen suits	
N – Effluent Guidelines				
Part 401 – General Provisions			Definitions and identification of toxic pollutants	
Part 403 – General Pretreatment Regulations Existing and New Sources of Pollution			Requirements for controlling pollutants which are discharged to POTW or which may contaminate sewage sludge	
Parts 405 – 422 – Requirements for specific point source categories			None of the activities specified in these parts are applicable to PNM.	
Part 423 – Steam Electric Power Generating Point Source			Wastewater effluent limits for power plants	

Regulation	Applicable	State Equiv.	Description	Comments
Category				
Part 424 – 471 – Requirements for specific point source categories			None of the activities specified in these parts are applicable to PNM.	
O – Sewage Sludge			Requirements for managing sewage sludge	
Q – Energy Policy			Fuel economy requirements	
R – Toxic Substances Control Act			Reporting requirements for chemical manufacturing, requirements for activities associated with asbestos, PCBs, and other specified substances	

New Mexico Administrative Code Requirements (20 NMAC)

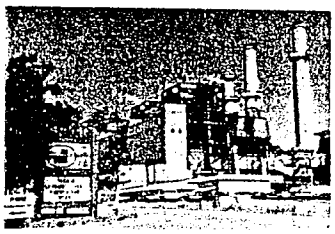
Regulation	Applicable	Description	Comments
1 – Environmental Protection, General	✓	Rule making, adjudicatory, and permit procedures	
2 – Air Quality	✓		
3 – Radiation Protection		Licensing and certification	
4 – Hazardous Waste			
1 – Hazardous Waste Management	✓	Requirements for the generation, storage, transport, and disposal of hazardous waste	
2 – Hazardous Waste Management Fees		Fee schedule for treatment, storage, and disposal facilities	
2 – Repeal of 1995 Hazardous Waste Fees		Repeal of 20 NMAC 4.2 filed 10/27/95	
3 – Annual Hazardous Waste Fees	✓	Fee schedule for generators, and operators of treatment, storage, and disposal facilities	
3 – Amendments to Annual Hazardous Waste Fees		Fee schedule for generators, and operators of treatment, storage, and disposal facilities that receive imported wastes	
5 – Underground Storage Tanks			
1 –1 General Provisions	✓	Applies to owners and operators of USTs	
2 – Registration of Tanks	✓	UST owners and operators must register tanks	
3 – Annual Fee	✓	Owners and operators of USTs must remit annual fees for the tanks	
4 – New and Upgraded UST Systems: Design, Construction, and Installation	✓	Performance requirements for new systems and upgrade requirements for existing tanks by 12/22/98	

Regulation	Applicable	Description	Comments
5 – General Operating Requirements	✓	Spill control, compatibility, repairs, and reporting and recordkeeping requirements	
6 – Release Detection	✓	Release detection requirements	
7 – Release Reporting, Investigation, and Confirmation	✓	Requirements in the event of a release or suspected release	
8 – Out-of-Service Systems and Closure	✓	Closure requirements	
9 – Financial Responsibility	✓	Requirements for demonstrating assets are sufficient enough to fund corrective actions if necessary	
10 – Administrative Review	✓	Procedures for review of department decisions	
11 – Lender Liability		Liability limitations for those who have a security interest in USTs	
12 – Corrective Action for UST Systems Containing Petroleum	✓	Requirements for clean up of releases	
13 – Corrective Action for UST Systems Containing Other Regulated Substances		Requirements for clean up of releases	
14 – Certification of Tank Installers	✓	Requirements for those who install and repair tanks	
15 – Corrective Action Fund Allocation for State-Lead Sites		Priority ranking procedures for corrective action and corrective action fund administration	
16 – Certification of Contractors		Requirements for corrective action contractors who will be compensated from the corrective action fund	
17 – Corrective Action Fund Payment and Reimbursement		Department procedures for fund disbursement	
6 – Water Quality			
1 – Standards for Interstate and Intrastate Streams		Designates the uses for which surface waters will be protected and prescribes water quality standards necessary to sustain uses.	
2 – Ground and Surface Water Protection	✓	Requirements regarding discharge plans, effluent limitations, abatement plans, UIC, and in-situ extraction wells	
3 – Voluntary Remediation Program		Provisions for voluntary remediation	
7 – Waste Water and Water Supply			
1 – Drinking Water		Requirements for operators of public water supply systems or those responsible for siting private water supply sources	
2 – Rural Water Supply Infrastructure			
3 – Liquid Waste Disposal		Requirements for on-site liquid waste systems which receive $\leq$ 2000 gallons of liquid waste per day	
4 – Utility Operator Certification		Operator requirements for the different classes of public water supply and waste water systems	

Regulation	Applicable	Description	Comments
5 – Waste Water Facility Construction Loans		Establish program to provide financial assistance to local authorities	
6 – Waste Water Facility Construction Loan Policies and Guidelines		Procedures for administering loans from the Waste Water Facility Construction Loan Fund	
7 – Review Procedures for Waste Water Facility Construction Loans		Identification and analysis of environmental impacts of facilities funded by the loan program	
8 – Colonias Priority Rating System		Ranking system to provide funds for waste water projects in border areas	
9 – Colonias Waste Water Grant Policies		Policy on administering funds through Colonias Waste Water Construction Grant Program	
8 – Nuisance Abatement		Mosquito and abatement control	
9 – Solid Waste			
1 – Solid Waste Management	✓	Requirements for transportation, storage, transfer, processing, transformation, recycling, or disposal of solid waste	
2 – Tire Recycling		Requirements for operating tire recycling facilities and storing scrap tires	
3 – Facility Grant Fund		Use of funds in Solid Waste Grant Fund by municipalities and counties	
4 - Solid Waste Plan			

San Juan Generating Station

Updated April 2000



SJGS

San Juan Generating Station (SJGS) is located on private land approximately 15 miles northwest of Farmington, New Mexico. The Station is operated by Public Service Company of New Mexico (PNM) and consists of four coal-fired, pressurized units.

	Gross MW	On-line	Net MW Generation
Unit 1	360 MW	1976	Unit 1 - 327 MW
Unit 2	350 MW	1973	Unit 2 - 316 MW
Unit 3	544 MW	1979	Unit 3 - 497 MW
Unit 4	544 MW	1982	Unit 4 - 507 MW
Total	1798 MW		Total - 1647 MW

Units 1 & 2: Jointly owned by PNM (50%) and Tucson Electric Power Company (50%).

Unit 3: Jointly owned by PNM (50%), Tri-State Generation and Transmission Association (8.20%), and Southern California Public Power Authority (SCPPA) (41.8%).

Unit 4: Jointly owned by PNM (38.457%), M-S-R Public Power Agency (Modesto, Santa Clara and Redding, California) (28.8%), City of Farmington (8.475%), Los Alamos County (7.2%), City of Anaheim (10.04%), and Utah Associated Municipal Power Systems (UAMPS) (7.028%).

Coal Supply

SJGS is a mine-mouth plant, located next to San Juan Mine. La Plata Mine is located approximately 20 miles from the plant. Both mines are operated by BHP Minerals and provide over six million tons of coal each year for plant consumption.

In Our Community

Employment: **438** full-time employees with an annual payroll near $23.7 million with additional associated payroll costs of $10.1million annually.

Taxes & Economy: SJGS is the largest property-tax payer in San Juan County paying approximately $8.4 million annually. In addition, owners of SJGS annually pay $41.2 million in royalties and taxes for coal deliveries to SJGS. SJGS also expends approximately $12 million in purchases (materials & supplies) and $14.9 million in contracts annually. These expenditures contribute significantly to the local economy.

Community Support: $125,000 is donated annually to local non-profit organizations with a focus on education, environment, and minority advocacy; $25,000 of which is for local college scholarships.

Since 1990, our Emergency Response Team has teamed up with local fire fighters to provide fire prevention education to over 5,000 elementary students in SJ County each year. This program has received the National Educators Association's "Business Friend of Education" state and regional awards and the National Fire Protection Association's "Fire Prevention Week" award.

Environmental

San Juan Plant meets or exceeds all state and federal regulations for NO_x, SO_2, and particulate control. SJGS is a zero liquid discharge facility. Twenty-four thousand acre-feet of water is available from the San Juan River and is used for boilers, cooling towers, and scrubbers. All water is managed efficiently, allowing only evaporation loss.

Pollution Control Investment (After Limestone Conversion)

30% of Capital and O&M costs are for pollution control systems.

Wastewater Management	$130,000,000
Flue Gas Desulfurization System	$217,700,000
Other Costs (precipitators & cooling tower)	$186,000,000
Mine Restoration	$5,000 - $6,000 / Acre

Environmental System Personnel

164 Employees or 37% of Total Plant Complement

Wastewater

San Juan Station first accomplished zero discharge in 1983. Wastewater is collected and routed to two Brine Concentrators for treatment. Total treatment capacity is approximately 1,000 gallons per minute.

Cooling Tower

A Hybrid Wet-Dry Cooling Tower was designed and built for Unit 3 to minimize the amount of water lost through evaporization while running the unit. This resulted in substantial net water savings at design conditions.

Emission Control System

A limestone forced oxidation system is used for flue gas desulfurization. It is capable of 75% removal of sulfur dioxide. This new system replaced an older more costly system, which had been in service for twenty years. The limestone system uses about 140,000 tons per year of limestone, which is supplied from the Grants, NM area. Removed sulfur is converted to almost 265,000 tons per year of gypsum, which is disposed of in the mine along with flyash and bottom ash. The new limestone system removes more sulfur dioxide than the old system did with less cost. Conversion of the old system into a forced oxidation limestone system cost about $75 million and has allowed for about ½ of the wastewater treatment to be abandoned. Also, the old Chemical Plant has been retired.

Our Environmental Management System has been registered in accordance with the ISO 14001 requirements.

ISO 14001

Certificate of Registration

conferred upon

San Juan Generating Station

Waterflow, New Mexico, USA

Having been examined in detail for conformance to the requirements of ISO 14001, First Edition, 1996-09-01, and having been determined by Advanced Waste Management Systems, Incorporated, the Registrar, to be in conformance with all provisions of this international standard at the aforementioned location, the Environmental Management System of the facility is hereby registered to ISO 14001. The registration shall remain in effect until March 23, 2003, providing the organization maintains its Environmental Management System in accordance with the specifications of ISO 14001 and the requirements of the Registrar.

In witness whereof this Certificate of Registration is granted and the Mark of Registration and our signatures are hereunto affixed

Attested to this 23rd day of March 2000.

Richard A. Ellis

Richard A. Ellis, Ph.D.
Arbiter of Registration

James N Mullican

James N. Mullican, P.E.
President

ISO 14001 REGISTERED

Registration Number 00075 ®

ANSI-RAB EMS ACCREDITED

National Environmental Achievement Track

Environmental Requirements Checklist

The following Checklist is provided to assist facilities in answering Section A, "Tell us about your facility," Question 6. The Checklist is given to help facilities identify the major federal, state, tribal, and local environmental requirements applicable at their facilities. The Checklist is not intended to be an exhaustive list of all environmental requirements that may be applicable at an individual facility.

If you use this Checklist and choose to submit it with your application, fill in your facility information below and enclose the completed Checklist with your application (see instructions).

Facility Name San Juan Generating Station
Facility Location: County Road 6800
Facility ID Number(s): NPDES – NMD0028606 , RCRA – NMD069424323,
(attach additional sheets if necessary) TRI – 87421SJNGCOUNT

Air Pollution Regulations	Check All That Apply
1. National Emission Standards for Hazardous Air Pollutants (40 CFR 61)	☐
2. Permits and Registration of Air Pollution Sources	☒
3. General Emission Standards, Prohibitions and Restrictions	☒
4. Control of Incinerators	☐
5. Process Industry Emission Standards	☒
6. Control of Fuel Burning Equipment	☐
7. Control of VOCs	☐
8. Sampling, Testing and Reporting	☒
9. Visible Emissions Standards	☒
10. Control of Fugitive Dust	☒
11. Toxic Air Pollutants Control	☐
12. Vehicle Emissions Inspections and Testing	☐
Other Federal, State, Tribal or Local Air Pollution Regulations Not Listed Above (identify)	
13. New Mexico Air Quality Control Regulations	☒
14.	☐

Hazardous Waste Management Regulations

1. Identification and Listing of Hazardous Waste (40 CFR 261)	
- Characteristic Waste	☒
- Listed Waste	☒
2. Standards Applicable to Generators of Hazardous Waste (40 CFR 262)	

- Manifesting ☒
- Pre-transport requirements ☒
- Record keeping/reporting ☒

3. Standards Applicable to Transporters of Hazardous Waste (40 CFR 263)
   - Transfer facility requirements ☐
   - Manifest system and record-keeping ☐
   - Hazardous waste discharges ☐
4. Standards for Owners and Operators of TSD Facilities (40 CFR 264)
   - General facility standards ☐
   - Preparedness and prevention ☐
   - Contingency plan and emergency procedures ☐
   - Manifest system, Record keeping and reporting ☐
   - Groundwater protection ☐
   - Financial requirements ☐
   - Use and management of containers ☐
   - Tanks ☐
   - Waste piles ☐
   - Land treatment ☐
   - Incinerators ☐
5. Interim Status Standards for TSD Owners and Operators (40 CFR 265) ☐
6. Interim Standards for Owners and Operators of New Hazardous Waste Land Disposal Facilities (40 CFR 267) ☐
7. Administered Permit Program (Part B) (40 CFR 270) ☐

Other Federal, State, Tribal or Local Hazardous Waste Management Regulations Not Listed Above (identify)

8. ☐
9. ☐

Hazardous Materials Management

1. Control of Pollution by Oil and Hazardous Substances (33 CFR 153) ☐
2. Designation of Reportable Quantities and Notification of Hazardous Materials Spill (40 CFR 302) ☒
3. Hazardous Materials Transportation Regulations (49 CFR 172-173) ☒
4. Worker Right-to-Know Regulations (29 CFR 1910.1200) ☒
5. Community Right-to-Know Regulations (40 CFR 350-372) ☒

Other Federal, State, Tribal or Local Hazardous Materials Management Regulations Not Listed Above (identify)

6. ☐
7. ☐

Solid Waste Management

1. Criteria for Classification of Solid Waste Disposal Facilities and Practices (40 CFR 257) ☐
2. Permit Requirements for Solid Waste Disposal Facilities ☐

3. Installation of Systems of Refuse Disposal ☐
4. Solid Waste Storage and Removal Requirements ☐
5. Disposal Requirements for Special Wastes ☐

Other Federal, State, Tribal or Local Solid Waste Management Regulations Not Listed Above (identify)

6. New Mexico Solid Waste Management Regulations ☒
7. ☐

Water Pollution Control Requirements

1. Oil Spill Prevention Control and Countermeasures (SPCC) (40 CFR 112) ☒
2. Designation of Hazardous Substances (40 CFR 116) ☒
3. Determination of Reportable Quantities for Hazardous Substances (40 CFR 117) ☒
4. NPDES Permit Requirements (40 CFR 122) ☒
5. Toxic Pollutant Effluent Standards (40 CFR 129) ☐
6. General Pretreatment Regulations for Existing and New Sources (40 CFR 403) ☐
7. Organic Chemicals Manufacturing Point Source Effluent Guidelines and Standards (40 CFR 414) ☐
8. Inorganic Chemicals Manufacturing Point Source Effluent Guidelines and Standards (40 CFR 415) ☐
9. Plastics and Synthetics Point Source Effluent Guidelines and Standards (40 CFR 416) ☐
10. Water Quality Standards ☒
11. Effluent Limitations for Direct Dischargers ☒
12. Permit Monitoring/Reporting Requirements ☒
13. Classifications and Certifications of Operators and Superintendents of Industrial Wastewater Plants ☐
14. Collection, Handling, Processing of Sewage Sludge ☐
15. Oil Discharge Containment, Control and Cleanup ☒
16. Standards Applicable to Indirect Discharges (Pretreatment) ☐

Other Federal, State, Tribal or Local Water Pollution Control Regulations Not Listed Above (identify)

17. New Mexico Water Quality Control Commission Regulations ☒
18. New Mexico Underground Storage Tank Regulations ☒

Drinking Water Regulations

1. Underground Injection and Control Regulations, Criteria and Standards (40 CFR 144, 146) ☐
2. National Primary Drinking Water Standards (40 CFR 141) ☐
3. Community Water Systems, Monitoring and Reporting Requirements (40 CFR 141) ☐
4. Permit Requirements for Appropriation/Use of Water from Surface or Subsurface Sources ☐

5. Underground Injection Control Requirements ☐
6. Monitoring, Reporting and Record keeping Requirements for Community Water Systems ☐

Other Federal, State, Tribal or Local Drinking Water Regulations Not Listed Above(identify)

7. ☐
8. ☐

Toxic Substances

1. Manufacture and Import of Chemicals, Record keeping and Reporting Requirements (40 CFR 704) ☐
2. Import and Export of Chemicals (40 CFR 707) ☐
3. Chemical Substances Inventory Reporting Requirements (40 CFR 710) ☐
4. Chemical Information Rules (40 CFR 712) ☐
5. Health and Safety Data Reporting (40 CFR 716) ☐
6. Pre-Manufacture Notifications (40 CFR 720) ☐
7. PCB Distribution Use, Storage and Disposal (40 CFR 761) ☐
8. Regulations on Use of Fully Halogenated Chlorofluoroalkanes (40 CFR 762) ☐
9. Storage and Disposal of Waste Material Containing TCDD (40 CFR 775) ☐

Other Federal, State, Tribal or Local Toxic Substances Regulations Not Listed Above (identify)

10. ☐
11. ☐

Pesticide Regulations

1. FIFRA Pesticide Use Classification (40 CFR 162) ☐
2. Procedures for Disposal and Storage of Pesticides and Containers (40 CFR 165) ☐
3. Certification of Pesticide Applications (40 CFR 171) ☐
4. Pesticide Licensing Requirements ☐
5. Labeling of Pesticides ☐
6. Pesticide Sales, Permits, Records, Application and Disposal Requirements ☐
7. Disposal of Pesticide Containers ☐
8. Restricted Use and Prohibited Pesticides ☐

Other Federal, State, Tribal or Local Pesticides Regulations Not Listed Above (identify)

9. ☐
10. ☐

Environmental Clean-Up, Restoration, Corrective Action

1. Comprehensive Environmental Response, Compensation and Liability Act (Superfund) (identify)
   Release Reporting Requirements ☒

2. RCRA Corrective Action (identify) ☐

☐

☐

Other Federal, State, Tribal or Local Environmental Clean-Up, Restoration, Corrective Action Regulations Not Listed Above (identify)

3. ☐
4. ☐

Richard T. Farrell
U.S. Environmental Protection Agency
Office of Policy, Economics, and Innovation
Washington, DC 20460

Subject: National Environmental Achievement Track September 22 ,2000

Dear Mr. Farrell:

Recently you sent us information concerning EPA's National Environmental Achievement Track program and extended an invitation to us to participate in this program. We have reviewed the information that you sent and the information on your Internet site. We are very much interested in the program and are submitting the enclosed application for the Achievement Track Program for San Juan Generating Station.

San Juan Generating Station (SJGS) is a four unit coal- fired steam electric generating station located near Farmington, NM. SJGS has a total capacity of approximately 1800 megawatts. The first unit began operation in 1976 and the last unit started in 1982. In 1983 SJGS achieved zero discharge – all of the water that we use at the facility is either recycled of disposed in lined solar evaporation ponds. There are nine different owners of SJGS. Public Service Company of New Mexico is the majority owner and the operating agent for the station. SJGS provides electricity to customers in New Mexico, Colorado, Utah, Arizona and California.

As you noted in your letter, San Juan Generating Station recently received registration through the ISO 14001 process for our Environmental Management System. Although an Environmental Management System was not new to San Juan we felt that the ISO 14001 system would formalize our EMS and offer a tool for continued improvements and a method to track those improvements. We successfully completed this registration process in March 2000. Since that time we have gone through both an internal audit and a surveillance audit of the system.

We have selected the following four aspect that we will include in our Achievement Track program:

1) SO2 Emissions Reductions

San Juan has had a flue gas desulfurization system installed and operating since 1979. Our original FGD system was a Wellman-Lord system. This was a regenerative system that removed the SO2 from the flue gas through a wet scrubbing solution. The scrubbing solution was regenerated and the SO2 was converted to elemental sulfur and sulfuric acid. In 1997 we began construction of a Limestone based FGD system. This system included the construction of new equipment and conversion of our existing SO2 absorber cells for the new limestone process. The construction and conversion was completed in 1999.

As part of our commitment to the New Mexico Environment Department with the new limestone system, we agreed to reduce the SO2 emissions limitations from the previous requirement of 0.65 lbs/mmbtu to 0.46 lb/mmbtu. The reductions of SO2 emissions that we have accomplished are:

Year	SO2 – tons	SO2 – lbs/mmbtu
1997	42,943	0.607
1998	39,960	0.574
1999	29,471	0.439

As you can see from the above data, we have made substantial reductions in our SO2 emissions. While further reductions of those magnitudes will not be possible, we feel that through optimization of the system that we will be able to further reduce our SO2 emissions. SJGS will commit to this optimization and will commit to a target of 0.420 lbs/mmbtu.

2) Toxic Release Inventory Chemical Reduction

In 1998 coal fired electric generating facilities were required to report the release or transfer of chemicals to the environment under the Toxic Release Inventory (TRI) requirements. For 1998 San Juan reported a total release/transfer of approximately 3.6 million pounds of TRI chemicals. For 1999 we were able to reduce the amount of chemicals reported to approximately 2.2 million pounds. This reduction was achieved by a combination of an increase in the amount of flue gas that was treated by our flue gas desulfurization system and by more accurate site specific coal and ash sampling.

San Juan will commit to a further reduction of theTRI chemicals that are released/transferred to the environment of 250,000 pounds. This reduction will be accomplished by increasing the amount of flue gas that is treated by our limestone SO2 removal system and by burning coal with a lower ash content.

3) **Reduction of Solid Waste**

San Juan burns approximately 6.5 million tons of coal each year. The coal averages approximately 26% ash. Most of the ash that is produced is returned to the adjacent San Juan Mine, owned by BHP, for use as fill for the surface mine pits. We are currently developing a partnership with a cement company to use ash for other beneficial purposes. This includes a replacement for cement and as a road base in highway construction.

San Juan will commit to further developing this partnership to use more of the ash for beneficial use. Although transportation costs and the uncertainty of the market can have a negative effect we will commit to increase the amount of ash that is used for other beneficial uses to at least 50,000 tons.

4) Endangered Species Habitat:

The San Juan River, which is the source of water for the San Juan Generating Station, is home to Colorado Pike Minnow and the Razorback Sucker. These are endangered or threatened species. SJGS has co-operated and participated in the San Juan River Implementation Project and is supporting the Bureau of Reclamation (BOR) with the construction of a migratory fish passage (fish ladder) around a water diversion structure in the San Juan River.

4) Endangered Species Habitat: (continued)

SJGS will commit to further support to the BOR. During 2000 or 2001 SJGS will donate $100,000 for the study, design and construction of the migratory fish passage. In addition, we will also work with the BOR on the design of the fish passage and if necessary will allow the construction of this fish passage on our land. We will also continue to work with the BOR and the US Game and Fish Department on the recovery of the Colorado Pike Minnow.

Attached is the application form for the Achievement Track program. Please feel free to contact Mike Farley at (505) 598-7628 if you have any questions or if you need any additional information.

Sincerely

Russell Huffman
Power Production Manager

Attachments